AMENDMENTS

IN THE CLAIMS:

Please cancel claims 5, and 10-13; and add new claims 18-25 as follows.

1-2. (Canceled).

3. (Previously Presented) A method for forming a ferroelectric capacitor comprising:

providing a dielectric layer over a semiconductor;

forming a barrier layer over said dielectric layer;

forming a first metal layer over said barrier layer;

forming a ferroelectric layer over said first metal layer;

forming a second metal layer over said ferroelectric layer;

forming a hard-mask layer over said second metal layer; and

etching said second metal layer, said ferroelectric layer, and said first metal layer using a three step plasma process comprising:

a first metal layer etch comprising the gases Cl_2, O_2, N_2, and CO;

a PZT etch comprising the gases BCl_3 and Cl_2; and

a second metal layer etch comprising the gases Cl_2, O_2, N_2, and CO,

wherein said plasma process comprises a PZT etch process comprising the gases BCl_3 and Cl_2 in a range of ratios from 1:4 to 10:1 respectively.

4. (Previously Presented) The method of claim 3, wherein said first metal layer comprises iridium, said ferroelectric layer comprises PZT, and said second metal layer comprises iridium.

5. (Canceled).

6. (Previously Presented) A method for forming a ferroelectric memory cell comprising:

providing a dielectric layer over a semiconductor;

forming a barrier layer over said dielectric layer;

forming a first metal layer over aid barrier layer;

forming a ferroelectric layer over said first metal layer;

forming a second metal layer over said ferroelectric layer;

forming a hard-mask layer over said second metal layer;

etching said first metal layer with a plasma process comprising the gases Cl_2, O_2, N_2, and CO; and

etching said ferroelectric layer with a plasma process comprising the gases BCl_3 and Cl_2, wherein said ferroelectric layer etch process further comprises the gases BCl_3 and Cl_2 in a range of ratios from 1:4 to 10:1 respectively.

7. (Original) The method of claim 6 wherein all etch process are performed at temperatures between 200°C and 500°C.

8. (Canceled).

9. (Previously Presented) The method of claim 6, wherein said first metal layer comprises iridium and said ferroelectric layer comprises PZT.

10-13. (Canceled)

14-17. (Canceled).

18. (New) The method of claim 3 wherein the N2 has a flowrate that is less than the flowrate of CO.

19. (New) The method of claim 3 wherein the Cl2 has a flowrate that is less than the flowrate of CO.

20. (New) The method of claim 3 wherein the N2 has a flowrate that is less than the flowrate of O2.

21. (New) The method of claim 6 wherein the N2 has a flowrate that is less than the flowrate of CO.

22. (New) The method of claim 6 wherein the Cl2 has a flowrate that is less than the flowrate of CO.

23. (New) The method of claim 7 wherein all etch process are performed at temperatures greater than 200°C and less than about 250°C.

24. (New) The method of claim 7 wherein all etch process are performed at temperatures greater than about 450°C and less than 500°C.

25. (New) The method of claim 11 wherein the N2 has a flowrate that is less than the flowrate of O2.